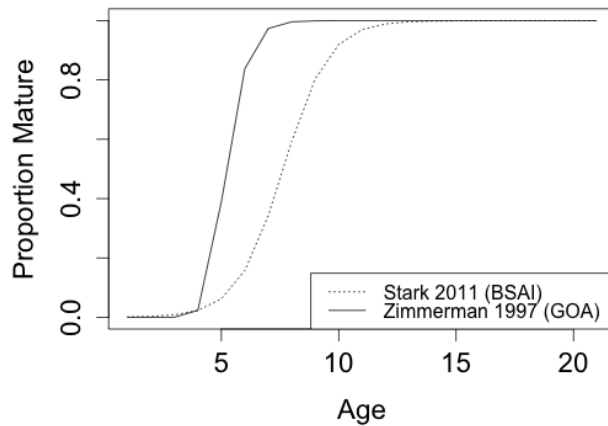


Maturity-at-age for BSAI ATF assessment (Plan Team 2013)  
Ingrid Spies

In 2011 a study was published which estimated maturity-at-age of arrowtooth flounder in the Bering Sea (Stark 2011). The Bering Sea and Aleutian Islands (BSAI) stock assessment uses parameters from Zimmerman (1997), which estimated maturity-at-length. In 2012 the BSAI Plan Team requested an analysis of the different maturity-at-age and length parameters in order to determine the best parameters to use in the BSAI ATF stock assessment. The 2011 maturity-at-age parameters are recommended to replace Zimmerman (1997) parameters in the BSAI ATF stock assessment because maturity-at-age is less variable than maturity-at-length and the sample is taken in the Bering Sea.

Figure 1: Stark (2011) parameters indicate that ATF mature at a younger age than estimates from the Zimmermann (1997) study.



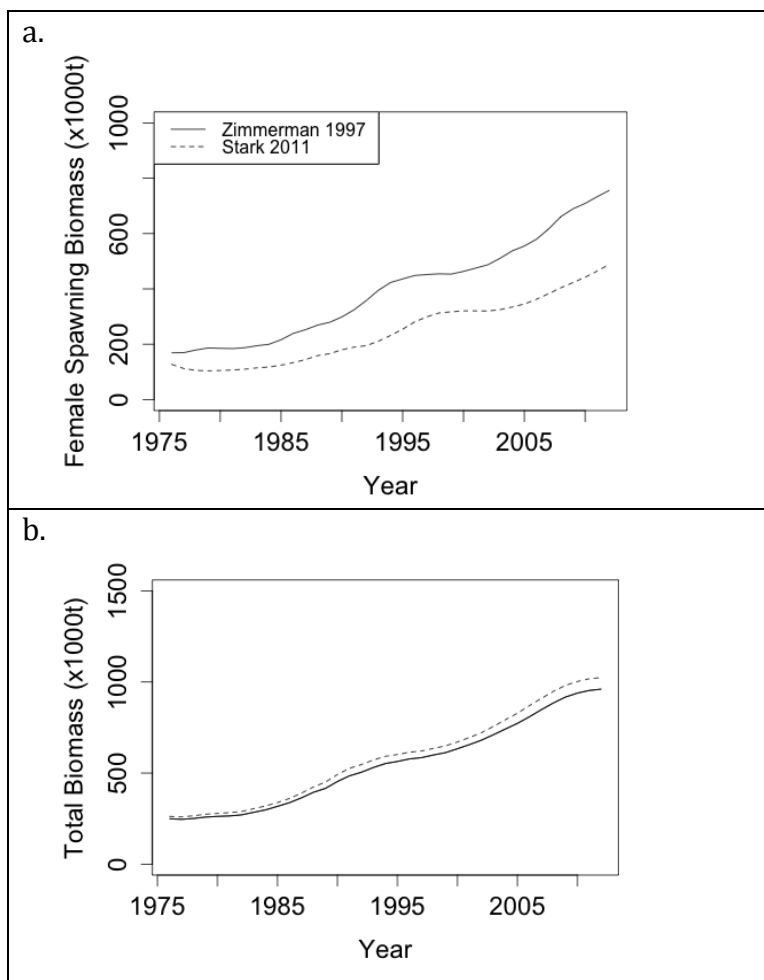


Figure 2: Both female spawning biomass (a) and total biomass (b) are lower using parameter estimates from Stark (2011).